

Please insert the following Abstract in accordance with 37 C.F.R. § 1.72(b):

### **ABSTRACT**

Techniques and systems for estimating the spreading factor of data in a channel in a spread spectrum radio communication system is described. An illustrative method includes communication between a base station and a mobile station that takes place over a multirate data channel having a corresponding control channel. The control channel is transmitted in parallel with the data channel and is decoded to extract control information in order to decode the data channel. An illustrative method and system for estimating the spreading factor of data in a channel in a spread spectrum radio communication system includes a transmitter and a receiver, wherein the transmitter transmits a data unit at one of a plurality of spreading factors over a data channel and transmits in parallel over a control channel a control unit including information for decoding the data unit.